

SYSTEM AND METHOD FOR A FLAMELESS TRACER / MARKER FOR AMMUNITION HOUSING MULTIPLE PROJECTILES UTILIZ- ING CHEMLUCENT CHEMICALS

Abstract

Small, medium and large caliber ammunition housing multiple projectiles are traced by means of a tracing/marking system utilizing chemlucent chemicals. The tracing/marking system also provides target marking when using small, medium and large caliber ammunition. Multiple projectiles are coated in a chemlucent chemical (referenced as the coating) and placed in the ammunition. Additionally, a liquid chemlucent chemical in a separate container is placed in the ammunition. When launched or fired from a gun or munition, the separate container breaks and the coating and the chemlucent chemicals combine, emitting light. The present system applies to multiple projectiles that are either launched in a scatter pattern from a gun or dispersed in a scatter pattern after the housing of the ammunition opens up outside the gun after firing. For military ammunition, the tracing/marking

system may use buckshot, steel balls, or tungsten balls. The tracing/marking system may also use various shaped projectiles such as stars, cubes, balls or flechettes. The chemiluminescent chemicals used by the tracing/marking system are non-flammable, biodegradable, and non-toxic.